

METHODS FOR USING DEFECTIVE PROGRAMMABLE LOGIC DEVICES
BY CUSTOMIZING DESIGNS BASED ON RECORDED DEFECTS

ABSTRACT

Methods for utilizing PLDs with localized defects. Each PLD has a unique identifier. In one embodiment, a PLD provider tests a series of PLDs, selecting those having localized defects and recording the location of each detected defect for each defective PLD in a defect database. On receiving an identifier from a user, the PLD provider provides to the user the location information for the defects associated with the identified PLD. The data can be received and provided, for example, over the Internet. In one embodiment, the PLD provider implements the design based on the defect locations and provides the resulting design file to the user. In some embodiments, an incremental compilation is performed. The methods of the invention can also be applied to other device-specific information, such as information on the speed of critical sub-components of the PLD.